

HUNTERS POINT ANNEX
TREASURE ISLAND NAVAL STATION

PHASE 1 REPORT
HAZARDOUS WASTE/MATERIAL INVENTORY

Prepared for Western Division Naval
Facilities, Engineering Command

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TABLE OF CONTENTS

HUNTERS POINT ANNEX
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Phase 1 Report
Hazardous Waste/Materials Inventory

	<u>Page</u>
INVENTORY WORKSHEETS, PLANS, AND PHOTOS	1
MATERIAL AND MAJOR WASTE CATEGORIES	2
RECYCLE VERSUS DISPOSAL	4
WASTE MATERIAL MANAGEMENT, SAMPLING, AND SEGREGATION	4
WASTE VOLUMES AND COST ESTIMATE	
Waste Volumes	6
Cost Estimate	7
APPENDICES	
A - Manifest Notes and Waste Descriptions	
B - Recycling Memorandum	
C - Haztech Systems, Inc. - Product Data	
D - Inventory Summary by Building/Area and Major Waste Category	
E - Inventory Worksheets and Plans - Naval Facilities	
F - Photos	

LIST OF FIGURES

<u>Figure No.</u>		<u>Following Page</u>
1	Hazardous Waste Inventory - Location Plan	Pocket at end of report

LIST OF TABLES

<u>Table No.</u>		<u>Following Page</u>
1	Phase 1 Naval Buildings and Areas Included in Survey	1
2	Estimated Waste Material Volumes by Category	6
3	Median Range Cost Estimate	7
4	High Range Cost Estimate	7

HUNTERS POINT ANNEX
TREASURE ISLAND NAVAL STATION

Phase 1 Report
Hazardous Waste/Material Inventory

This Phase I report summarizes the fence-to-fence survey for the Navy installations at Hunters Point Annex, Treasure Island Naval Station, California. This report expands on our November 23, 1987 letter by including a volume estimate and a cost estimate for removal of materials and waste from Hunters Point.

The Phase I work followed the October 29, 1987 work plan. A listing of Navy buildings and areas included in the survey is provided in Table 1. Open areas of Hunters Point, not associated with a building, were assigned identifying area numbers, as shown in Figure 1 (included in pocket at back of report). This report is divided into the following sections: inventory worksheets, material and major waste categories, recycle/disposal options, waste material management, sampling, and segregation, and waste volumes and cost estimate.

INVENTORY WORKSHEETS, PLANS, and PHOTOS

The inventory worksheets and plans associated with each building and area have been completed by ERM-West field personnel in accordance with the workplan. Since there are many pages associated with the inventory worksheets and plans, they are presented as a separately bound volume in Appendix E. Similarly, photos are bound in a separate three-ringed binder (Appendix F).

The workplan and the use of the inventory sheets was slightly modified in the use, description, and notation used in identifying

Table 1

Phase 1 Naval Buildings and Areas
Included in Survey

<u>Navy Buildings</u>	<u>Area Descriptions</u>
19	Areas I - XV
102	Pier 2
113	Tank Farm
141	Drydocks 5, 6, 7
146	Drydocks 2 and 3
203	Pier 1
204	South Pier
205	North Pier
207	Substation Y (Bldg 411)-SS 411
211	Substation G (Bldg 135)-SS 135
214	Substation L (Bldg 229)-SS 229
215	Substation AA (Bldg 100)-SS 100
217	Substation B (Bldg 140)-SS 140
223	Substation C (Bldg 205)-SS 205
225	Substation D (Bldg 231)-SS 231
228	Substation E (Bldg 219)-SS 219
231	Substation GH4 (near Bldg 214)-SS 214
251	Substation GH2 (Bldg 273)-SS 273
253	Substation T (Bldg 123)-SS 123
258	Substation U (Bldg 128)-SS 128
270	Substation I (Bldg 306)-SS 306
271	Substation V (Bldg 122)-SS 122
274	
281	
282	
302	
369	
400	
411	
413	
414	
439	
500	
505	
521	
525	
526	
530	
702	
813	
816	
818	
819	
901	
921	

the proposed DOT No./Waste No. indicated in column 6 of the inventory worksheet. Instead of using a DOT number associated with the assumed waste noted in the field, we have placed an abbreviation in the DOT column that is cross referenced to Appendix A-1, Manifest Summary Waste Description.

Appendix A-1 cross-references a waste abbreviation to a waste material and provides a complete (suggested) manifest description for the assumed wastes. For a category of waste, such as paints (abbreviation = PNT), the category has been divided into potential hazardous subcategories with appropriate suffixes (flammable paint = PNT-F; combustibile paint = PNT-C; paint sludges = PNT-S; etc.) in Appendix A-1. We have, however, only noted the major category abbreviation (i.e. PNT) with no suffix on the Inventory Worksheet, since at the time of the survey, we could not, in most cases, identify the subcategory of the waste. Only after the wastes have been sampled or profiled can the correct DOT description be determined and used on the manifests.

On each worksheet we have labeled a column "Immediate Hazard". This column was to be checked if the inventoried item was, in the opinion of the field personnel, a priority hazard to people or the environment. The checking of the column is a red flag to alert the Navy that the item(s) should be of higher priority than inventoried items that are not checked.

MATERIAL and MAJOR WASTE CATEGORIES

The majority of the material at Hunters Point is liquid. The liquid forms comprise discrete material or mixtures such as oily water, oils, solvents, paints, thinners, acids, caustics, plating chemicals, and detergents. Another category of liquid type material is hydraulic oil. Hydraulically operated equipment is found in almost every building and area at Hunters Point. Some of

the equipment has oil reservoirs, others small recirculation systems. In addition, some of the equipment is in use, but the majority of the equipment is located in buildings that have been abandoned or located in designated storage areas. Hydraulically operated machinery is a concern for waste disposal because of potential PCB contamination.

Other major categories of materials are solids, gas bottles, batteries, and asbestos. Solids varied from solid chemical forms, such as drummed sodium hydroxide, to soil stained with oil-like material. Other solid forms were rags, filters, and drums storing solids or various material forms.

Gas bottles ranged from 7 pound to 150 pound cylinders. Various gases (acetylene, propane, atmospheric (nitrogen, oxygen, argon, helium, hydrogen), and refrigerant) were products noted on the cylinders. Identifying whether the bottle had product was, in most cases, not possible since the bottle's gauges were missing or broken.

Batteries comprised lead/acid (wet) to dry type. Some batteries were in vehicles, others were discarded in random array throughout Hunters Point.

Asbestos in both friable and non-friable forms were noted throughout the facility. Friable material is an immediate hazard. Non-friable asbestos was noted for use when a building or area is to be decommissioned, renovated, or demolished. Identifying material as asbestos was based on our experienced in identifying asbestos contaminated material but must be confirmed by laboratory analysis.

RECYCLE VERSUS DISPOSAL

We believe that a majority of the materials and waste identified at Hunters Point, particularly solvents, oils, and metals, can be recycled. We have checked with two recyclers and have confirmed that interest is high in recycling industrial wastes. In Appendix B is a memorandum that highlights the particular PCB and chlorinated compound concerns of recyclers.

For liquids, the cost of recycling is dependent on volume, chlorinated solvent concentration, and sludge content. The unit cost of recycling material is the least for recycled wastes with large volumes (bulk - i.e. greater than 500 gallons), with concentrations of chlorinated solvents less than one percent, and preferably, with negligible sludge concentrations. However, some recyclers, at additional cost, will take containers as small as one gallon (if lab packed).

WASTE MATERIAL MANAGEMENT, SAMPLING, and SEGREGATION

To manage the waste material, a management plan should be developed and implemented to collect the wastes at one central point at Hunters Point, segregate the material for compatibility, and then divide the waste into known material and suspect material. The known material can be labeled and tagged for recycle or disposal. The suspected material can be sampled, composited (for compatible waste material only), and tested for PCBs and chlorinated compounds. Based on the test results, the suspected material can be segregated, labeled, tagged, and manifested with the correct DOT description for recycle or disposal.

Sampling of the waste material can be costly. An important economic point for the generator (Navy) is that recyclers will profile (i.e. analyze) waste material for chemical and physical components. Based on the waste profile, the recycle option is selected and thus the cost of recycling is determined. With this in mind, we believe that the majority of the liquid waste material should be sampled by the Navy or a contractor and tested for only three groupings: chlorinated solvents, PCBs, and flammability (i.e. flash point). This preliminary screening can be used segregate the material into three groupings for disposal and recycling: (1) PCB contaminated waste that is not recyclable and should be disposed by incineration at permitted PCB disposal facilities; (2) waste with chlorinated solvents; and (3) wastes not having either PCBs or chlorinated solvents.

The majority of the waste material can be segregated either by certified analytical procedures (i.e. sending waste samples to a certified laboratory) or by performing relatively simple analysis in the field. The sampling methodology and analysis will depend on how the waste management program is to be structured. If an outside contractor will be contracted to perform the work, then the Navy in most cases will not be concerned about the segregation and sampling costs, since the waste removal and disposal contract would be competitively bid. If the Navy is to segregate the material on force account, however, then field analysis may save the Navy money. In Appendix C we have provided information on a system for identifying and characterizing chemicals in the field by simple field analytical procedures. This method would allow Navy personnel to set up a field laboratory, sample, test, segregate, and combine wastes and recyclable material quickly, efficiently, and economically.

For the disposal project it is recommended that a health and safety plan be required and prepared by the contractor or Navy division performing the work. Since many of the containers are sealed and the contents not specifically known, caution should be used around all the material. Appropriated safety clothing and equipment should be mandatory. Containers should be opened with care to minimize personnel exposure and emission of high pressure/high jetting of vapors or liquids. It is suggested sampling and movement of material be performed by two-person teams. One person performing the task, the second person observing and assisting where necessary.

WASTE VOLUMES and COST ESTIMATE

A cost estimate for a project of this size and magnitude is subject to many unknowns and assumptions. The listing and identification of the materials on the inventory sheets was based on either information contained on the storage container, box, bin, drum, and pallet or, where there was no identification, on the physical appearance of the material(s). There is no guarantee that the material in a given container or the description of the physical appearance is actually what was listed on the inventory worksheets. Sampling of material and analytical testing is, in most cases, the only method for positive identification.

Waste Volume Estimates

Quantities of waste have been estimated by segregating the inventoried waste into the major waste categories and adding the individual estimated volumes. Table 2 summarizes the major waste categories and presents a volume estimate for each category. A detail breakdown of the major inventoried waste categories by building and area is presented in Appendix D. In most cases the actual volume of the material was difficult to estimate since many

Table 2

Summary of Estimated Waste Material Volumes by Category

Inventory Category	Count/ Sites	Estimated Volume
Oils		
1 gallon	116	90
5 gallon	331	1339
10 gallon	7	49
55 gallon	254	10205
Bulk/other (gals)	---	734

Total	708	12417 gallons
Oil (PCB)		
1 gallon	7	6
5 gallon	18	65
10 gallon	3	20
15 gallon	6	80
30 gallon	1	20
55 gallon	3	165

Total	38	356 gallons
Paints		
1 gallon	96	75
5 gallon	47	213
10 gallon	3	25
55 gallon	--	--
Bulk/other (gals)	2	14500

Total	148	14813 gallons
Solvents		
1 gallon	120	114
5 gallon	70	230
10 gallon	4	14
55 gallon	7	235
Bulk/other (gals)	0	135

Total	201	728 gallons
Asbestos		
Friable	21	50 yards
Batteries		
Automotive	110	
Other	94	

Total	204 each	
Gas Cylinders		
All sizes		
Acetylene	177	
Propane	13	
Atmospheric	56	
Chlorine	6	
Refrigerant	3	
Other	36	

Total	291 each	

Table 2

Summary of Estimated Waste Material Volumes by Category

Inventory Category	Count/ Sites	Estimated Volume
Miscellaneous Equipment		
Refrigerant Units	58	300
Hydraulic (PCB) Potential	351	3700

Total	409	4000 gallons
Solids		
Sandblast	11	55
Miscellaneous	---	89

Total	11	144 yards
Acids		
1 gallon	---	---
5 gallon	1	5
15 gallon	---	---
55 gallon	---	---
Bulk	---	50

Total	1	55 gallons
Caustics		
1 gallon	---	---
5 gallon	1	5
15 gallon	2	30
55 gallon	4	200
Bulk	---	50

Total	7	285 gallons

containers were closed and sealed. In other cases, what may have been identified as a barrel of oil, may be 90 percent water with an oil layer floating on the surface.

Cost Estimates

Cost estimates ranging from median to high ranges are presented in Tables 3 and 4, respectively. These estimates are based on the volumes identified in Table 2 and assume that the materials will be sampled, segregated, and disposed by a licensed contractor. Unit sampling costs were derived from quotes from several laboratories in California. The turnaround time for sample results was assumed to be two weeks. Unit disposal costs were based on quotes from landfills, recyclers, and disposal companies. Additional assumptions used in estimating costs are listed at the bottom of the tables.

A median lower range cost for this project is on the order of 1.9 million dollars. This estimate includes \$500,000 in sampling costs and \$1,400,000 for disposal of the waste material. Implicit in the sampling costs was the assumption that common materials would be composited prior to analysis. Therefore the number of samples is less than the number of sites (counts or containers, drums, pallets, cylinders, etc.). Additionally, the labor hour per site for the disposal work was an assumed average hour estimate based on the assumption that two men would be working each site.

A high range cost for the project is on the order of three million dollars. This cost estimate assumes that each discrete waste volume and site (count) would be sampled, thus requiring more sampling time allocated to the sampling phase of the project. Additionally, the assumed hourly labor component for the disposal of the material was increased by 20 percent over the median range

Table 3
Median Range Cost Estimate

Inventory Category			Number of Sites/ Counts			Total Volume			Estimated Sampling Costs					Estimated Disposal Costs						
									Number samples	Unit Cost	Sampling Costs	(2)		(3)		Disposal Cost	Labor Hrs per Site	(4)	Estimated	
												Labor Cost	Total Sampling Cost	Unit cost range	Low				High	Low
Oils	710	12400 gal	500	\$250	(1) \$125,000	\$50,000	\$175,000	\$1.00	\$3.50	\$12,400	\$43,400	6	\$266,250	\$278,650	\$309,650					
Oil (PCB)	40	370 gal	40	\$250	(1) \$10,000	\$4,000	\$14,000	\$1.00	\$15.00	\$370	\$5,550	6	\$15,000	\$15,370	\$20,550					
Paints	150	14800 gal	100	\$250	(1) \$25,000	\$10,000	\$35,000	\$1.00	\$3.50	\$14,800	\$51,800	8	\$75,000	\$89,800	\$126,800					
Solvents	200	730 gal	100	\$250	(1) \$25,000	\$10,000	\$35,000	\$1.00	\$3.50	\$730	\$2,555	6	\$75,000	\$75,730	\$77,555					
Asbestos	21	76 yds	100	\$50	\$5,000	\$10,000	\$15,000	\$75.00	\$100.00	\$5,700	\$7,600	16	\$21,000	\$26,700	\$28,600					
Batteries	205	205 ea	---			\$0	\$0	(\$1.50)	\$1.00	(\$308)	\$205	4	\$51,250	\$50,943	\$51,455					
Gas Cylinders All sizes	290	290 ea	50	\$200	\$10,000	\$5,000	\$15,000	\$50.00	\$200.00	\$14,500	\$58,000	4	\$72,500	\$87,000	\$130,500					
Misc Equipment Refrig Units	60	300 gal	60	\$150	\$9,000	\$6,000	\$15,000	\$0.00	\$100.00	\$0	\$30,000	4	\$15,000	\$15,000	\$45,000					
Hydr (PCB?)	350	3700 gal	350	\$150	\$52,500	\$35,000	\$87,500	\$1.50	\$10.00	\$5,550	\$37,000	12	\$262,500	\$268,050	\$299,500					
Solids	70	150 yds	60	\$450	(1) \$27,000	\$6,000	\$33,000	\$50.00	\$150.00	\$7,500	\$22,500	16	\$70,000	\$77,500	\$92,500					
Acids	2	55 gal	2	\$100	\$200	\$200	\$400	\$1.00	\$3.50	\$55	\$193	4	\$500	\$555	\$693					
Caustics	7	285 gal	8	\$100	\$800	\$800	\$1,600	\$1.00	\$3.50	\$285	\$998	4	\$1,750	\$2,035	\$2,748					
Subtotal Direct Expenses @ 5			\$289,500 \$137,000 \$426,500 \$21,325					\$61,583 \$259,800 \$925,750 \$987,333 \$1,185,550 \$49,367 \$59,278												
Subtotal Contingency @ 30%			\$447,825 \$134,348					\$61,583 \$259,800 \$925,750 \$1,036,699 \$1,244,828 \$311,010 \$373,448												
Total			\$582,173					\$1,347,709 \$1,618,276												

Notes:

- (1) Analysis for PCBs, EPA 601, and flashpoint
- (2) Sampling labor assumes 2 hours per sample at \$50/hour- includes time for sampling, labling, and transite.
- (3) Includes transportation to disposal/recycle site
- (4) Includes 25 percent overhead and profit; labor \$50/hr

Table 4
High Range Cost Estimate

Inventory Category			Number of Sites/ Counts			Total Volume			Estimated Sampling Costs					Estimated Disposal Costs							
									Number samples	Unit Cost	Sampling Costs	(2) Labor Cost	Total Sampling Cost	(3) Unit cost range		Disposal Cost		Labor Hrs per Site	(4) Labor Cost	Estimated Tot Disposal Cost	
														Low	High	Low	High			Low	High
Oils	710	12400 gal	710	\$250	(1) \$177,500	\$106,500	\$284,000	\$1.00	\$3.50	\$12,400	\$43,400	7	\$310,625	\$323,025	\$354,025						
Oil (PCB)	40	370 gal	40	\$250	(1) \$10,000	\$6,000	\$16,000	\$1.00	\$15.00	\$370	\$5,550	7	\$17,500	\$17,870	\$23,050						
Paints	150	14800 gal	150	\$250	(1) \$37,500	\$22,500	\$60,000	\$1.00	\$3.50	\$14,800	\$51,800	10	\$93,750	\$108,550	\$145,550						
Solvents	200	730 gal	200	\$250	(1) \$50,000	\$30,000	\$80,000	\$1.00	\$3.50	\$730	\$2,555	7	\$87,500	\$88,230	\$90,055						
Asbestos	21	76 yds	100	\$50	\$5,000	\$15,000	\$20,000	\$75.00	\$100.00	\$5,700	\$7,600	19	\$24,938	\$30,638	\$32,538						
Batteries	205	205 ea	---			\$0	\$0	(\$1.50)	\$1.00	(\$308)	\$205	5	\$64,063	\$63,755	\$64,268						
Gas Cylinders All sizes	290	290 ea	125	\$200	\$25,000	\$18,750	\$43,750	\$50.00	\$200.00	\$14,500	\$58,000	5	\$90,625	\$105,125	\$148,625						
Misc Equipment Refrig Units	60	300 gal	60	\$150	\$9,000	\$9,000	\$18,000	\$0.00	\$100.00	\$0	\$30,000	5	\$18,750	\$18,750	\$48,750						
Hydr (PCB?)	350	3700 gal	350	\$150	\$52,500	\$52,500	\$105,000	\$1.50	\$10.00	\$5,550	\$37,000	14	\$306,250	\$311,800	\$343,250						
Solids	70	150 yds	70	\$450	(1) \$31,500	\$10,500	\$42,000	\$50.00	\$150.00	\$7,500	\$22,500	19	\$83,125	\$90,625	\$105,625						
Acids	2	55 gal	2	\$100	\$200	\$300	\$500	\$1.00	\$3.50	\$55	\$193	5	\$625	\$680	\$818						
Caustics	7	285 gal	8	\$100	\$800	\$1,200	\$2,000	\$1.00	\$3.50	\$285	\$998	5	\$2,188	\$2,473	\$3,185						
Subtotal Direct Expenses @ 5					\$399,000	\$272,250	\$671,250 \$33,563			\$61,583	\$259,800		\$1,099,938	\$1,161,520 \$58,076	\$1,359,738 \$67,987						
Subtotal Contingency @ 30%							\$704,813 \$211,444			\$61,583	\$259,800		\$1,099,938	\$1,219,596 \$365,879	\$1,427,724 \$428,317						
Total							\$916,256							\$1,585,475	\$1,856,042						

Notes:

- (1) Analysis for PCBs, EPA 601, and flashpoint
- (2) Sampling labor assumes 3 hours per sample at \$50/hour- includes time for sampling, labling, and transite.
- (3) Includes transportation to disposal/recycle site
- (4) Includes 25 percent overhead and profit; labor \$50/hr

estimate to account for the extensive sampling requirement. It is assumed that more detailed sampling will segregate the waste into finer disposal categories and thus require more labor effort for segregation, tagging, and disposal. The unit disposal cost ranges were not changed since the ranges are based on discussions with recyclers, landfills, and disposal contractors.

In comparing both estimates, analytical cost predominate in the sampling phase of the project, while labor drives the costs for the disposal segment of the work. Based on the cost estimate tables, project costs can be minimized by controlling and managing the sampling and identification portion of the project. Field analysis and compositing can substantially reduce the analytical project cost. Additionally, in the disposal portion of the project, costs can be minimized by centralizing and segregating wastes at one or, at the most, two locations within Hunters Point. Reducing material handling and movement to a minimum can reduce coordination, management, and man-power costs.

APPENDIX A

MANIFEST NOTES AND WASTE DESCRIPTIONS

Attachment A

Manifest Notes

1. Summarized on Attachment A-1 is a listing of suggested manifest wording for potential waste materials. The listing is not all inclusive, but provides the basis for completing the US DOT description on the Uniform Hazardous Waste Manifest (Attachment A-3), line 11a for many waste materials.
2. In Attachment A-1 the "Item Abbrev." and "Name" are identifiers for quickly accessing the suggested DOT description for a given waste material. The item abbreviation is the abbreviation used on the inventory work sheets under the DOT No./Waste No. column.
3. In Attachment A-2, the number under the "Att A-2 Code" column refers to the listing in Attachment A-2. Each code number corresponds to a typical phrase or sentence that can be useful in completing manifest line 15 - Special Handling Instructions and Additional Information. The suggested phrasing should be amended, if necessary, such that the wording is as specific as possible to the manifested waste material.
4. If possible, manifest line J should be completed to specifically identify the concentration of manifested material or a specific compound in the waste listed on line 11a-e, or any other description of the waste.
5. Some general comments on the descriptions in Attachment A-1:
 - * Flash point - refer to product label, MSDS, or waste profile sheet for flash point.
 - * Combustible - use where the flash point of the waste is greater than or equal to 100 degrees F, but less than 200 degrees F.
 - * Flammable - use where the flash point of the waste is less than 100 degrees F.
 - * Some wastes are noted as California Regulated Waste Only.
 - * Some wastes are provided with two descriptions: 1) general description and 2) RQ description. The RQ description should be used if the reportable quantity of the material exceeds the total specified in Hazardous Materials Table of DOT 172.101.

Attachment A-1
Manifest Summary (Suggested) Waste Descriptions

Item Abbrv.	Item Name	Description	Att A-2 Code
AC	Acid	Waste Acid, Liquid N.O.S., Corrosive Material, NA1760	1
ACE	Acetone	Waste Acetone, Flammable Liquid, UN1090	1
ACT	Acetylene	Waste Acetylene, Flammable Gas, UN1001	1
AD-C	Adhesive-Combustible	Waste Adhesive, Combustible Liquid, UN1133	1
AD-F	Adhesive-Flammable	Waste Adhesive, Flammable Liquid, UN1133	1
AF	Antifreeze	Waste Antifreeze: California Regulated Waste Only	1
ASB	Asbestos	Waste Asbestos, ORM-C	1 & 2
BEN	Benzene	Waste Benzene, Flammable Liquid, UN1114 OR RQ, Waste Benzene, Flammable Liquid, UN1114	1
Bat -W	Battery	Waste Battery, Wet, Filled with acid, corrosive materials -UN 2794	1 & 3
Bat-D	Battery	Dry cell battery: California Regulated Waste Only	1
CA-H	Calcium Hypochlorite-Hyd	Waste Calcium Hypochlorite, Hydrated, Oxidizer, UN2880 OR RQ, Waste Calcium Hypochlorite, Hydrated, Oxidizer, UN2880	1
CA-M	Calcium Hypochlorite-Mix	Waste Calcium Hypochlorite Mixture, dry, Oxidizer, UN1748 OR RQ Waste Calcium Hypochlorite Mixture, dry, Oxidizer, UN1748	1
CLN-1	Cleaner - Combustible	Waste Compound, Cleaning, Liquid, Combustible liquid, NA1993	1
CLN-2	Cleaner - Corrosive	Waste Compound, Cleaning, Liquid, Corrosive Material, NA1760	1

Attachment A-1
Manifest Summary (Suggested) Waste Descriptions

Item Abbrv.	Item Name	Description	Att A-2 Code
CLN-3	Cleaner - Flammable	Waste Compound, Cleaning, Liquid, Flammable Liquid, NA1993	1
Cl	Chlorine	Waste Chlorine, Nonflammable Gas and Poison - UN 1017, (RQ 10/4.54)	1
EMPTY-1	Empty Container	Residue: Last contained "INSERT DESCRIPTION OF CONTENTS HERE DESCRIBING CONTENTS WITH SHIPPING NAME, HAZ. CLASS, AND UN/NA #"	1
ETH-GL	Ethylene Glycol	Ethylene Glycol or Triethylene Glycol: California Regulated Waste Only	1
FL	Flammable Liquid	Waste Flammable Liquid, N.O.S., Flammable Liquid, UN1993	1
FO	Fuel Oil	Waste Fuel Oil, Combustible Liquid, NA1993 OR Waste Fuel Oil Mixture, Combustible Liquid, NA1993	1
GAS	Gasoline	Waste Gasoline, Flammable Liquid, UN1203 1 OR Waste Gasoline Mixture, Flammable Liquid, UN1203	1
H2	Hydrogen	Waste Hydrogen, compressed, flammable gas, UN1049	1
HEX	Hexane	Waste Hexane, Flammable liquid, UN1208	1
HYD-1	Hydraulic Fluid-Combust	Waste Petroleum Oil Mixture, N.O.S., Combustible Liquid, NA1270	1
HYD-2	Hydraulic Fluid - Non Com	Hydraulic or Automatic Transmission Fluid : (Specify) California Regulated Waste Only	1
HYDRA-1	Hydrazine, anhydrous	Waste Hydrazine, Flammable Liquid, UN2029	1
HYDRA-2	Hydrazine, aqu eous sol.	Waste Hydrazine, aqueous solution, Corrosive material, UN2030	1
LIQ-C	Liquid - Corrosive	Waste Corrosive Liquid, N.O.S., Corrosive Material, UN1760	1

Attachment A-1
Manifest Summary (Suggested) Waste Descriptions

Item Abbrv.	Item Name	Description	Att A-2 Code
MCL	Methylene Chloride	Waste Methylene Chloride, ORM-A, UN1593	1
NA2PO4	Sodium Phosphate	Waste Sodium Phosphate (add dibasic or tribasic), ORM-E, NA9147 or NA9148 OR RQ, Waste Sodium Phosphate ...	1
NaOH	Sodium Hydroxide-Solid	Waste Sodium Hydroxide, Dry Solid, Corrosive Material, UN1823 OR RQ, Waste Sodium Hydroxide, Dry Solid, Corrosive Material, UN1823	1
OIL-C	Oil - Combustible	Waste oil or Petroleum Oil, N.O.S., Combustible Liquid, NA1270	1
OIL-F	Oil - Flammable	Waste oil or Petroleum Oil, N.O.S., Flammable Liquid, NA1270	1
OIL-S	Oily solids	Oily Solids: California Regulated Waste Only (specify - filters, saturated rags	1
OIL-W	Oily Water	Oily water, ___% or ppm oil: California Regulated Waste Only	1
PCB	PCBs	Waste Polychlorinated Biphenyls, ORM-E, UN2315 OR RQ, Waste Polychlorinated Biphenyls, ORM-E, UN2315	1
PNT-C	Waste Paint - Combustible	Waste Paint, Combustible Liquid, UN1263	1
PNT-CR	Waste Paint - Corrosive	Waste Paint, Corrosive Material, NA1760	1
PNT-F	Waste Paint - Flammable	Waste Paint, Flammable Liquid, UN1263	1
PNT-S	Waste Paint - Sludge	Waste Paint Related Material, Flammable Liquid, NA1263	1
PNT-TC	Paint Thinner - Combust	Waste Paint Related Material, Combustible Liquid, NA1263	1
PNT-TF	Paint thinner - Flammable	Waste Paint Related Material, Flammable Liquid, NA1263	1

Attachment A-1
Manifest Summary (Suggested) Waste Descriptions

Item Abbrv.	Item Name	Description	Att A-2 Code
PRO	Propane	Waste Liquefied Petroleum Gas, Flammable Gas, UN1075	1
REF-F	Refrigerant/D ispersant	Waste refrigerant gas, OR Waste Dispersant Gas, N.O.S., Flammable Gas, NA1954	1
REF-NF	Refrigerant/D ispersant	Waste Refrigerant Gas or Waste Dispersant Gas, N.O.S., Nonflammable Gas, UN1078	1
RES	Resin	Waste Resin Solution, Flammable Liquid, UN1866	1
SO-1	Sodium Sulfide, anhydrous	Waste Sodium Sulfide, anhydrous, Flammable solid, UN1385	1
SO-2	Sodium Sulfide, hydrated	Waste Sodium Sulfide, hydrated, Corrosive Material, UN 1849	1
SOL-1	Unspec.Solven t-Halogenate	Waste ORM-A, N.O.S., ORM-A, NA1693	1
SOL-2	Unspec.Solven t-Hydrocarbn	Waste Flammable Liquid, N.O.S., Flammable Liquid, UN1993	1
SOL-3	Unspec.Solven t-Oxygenated	Waste Flammable Liquid, N.O.S., Flammable Liquid, UN1993	1
SOLID	Solid Rags, debris	Hazardous Waste, Solid, N.O.S., ORM-E, NA9189	1
SOLID-1	Solid - Corrosive	Waste Corrosive Solid, N.O.S., Corrosive Material, UN1759	1
SOLID-2	Solid	Hazardous Waste, Solid, N.O.S., ORM-E, NA9189	1
STOD	Stoddard Solvent	Waste Combustible Liquid, N.O.S., Combustible Liquid, NA1993	1
TCA	1,1,1-Trichlo roethane	Waste 1,1,1-Trichloroethane, ORM-A, UN2831	1

Attachment A-1
Manifest Summary (Suggested) Waste Descriptions

Item Abbrev.	Item Name	Description	Att A-2 Code
TCE	Trichloroethylene	Waste Trichloroethylene, ORM-A, UN1710 OR RQ, Waste Trichloroethylene, ORM-A, UN1710	1
TOL	Toluene	Waste Toluene, Flammable Liquid, UN1294 OR RQ, Waste Toluene, Flammable Liquid, UN1294	1
XYL	Xylene	Waste Xylene, Flammable Liquid, UN1307 OR RQ, Waste Xylene, Flammable Liquid, UN1307	1

Attachment A-2
Manifest Line 15 (Suggested) Wording

This attachment is to be used with Attachment A-1: Manifest Summary (Suggested) Waste Description.

Code	Suggested Wording
1	Use personal protective clothing(gloves, coveralls, boots), goggles, and respirator as required.
2	Keep inner bags sealed and waste materials wetted to control dust. Avoid inhaling asbestos dust.
3	Caution contains acid.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address					State Manifest Document Number 84645959
4. Generator's Phone ()					State Generator ID
5. Transporter 1 Company Name	6. US EPA ID Number				
7. Transporter 2 Company Name	8. US EPA ID Number				
9. Designated Facility Name and Site Address	10. US EPA ID Number				
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.					
b.					
c.					
d.					
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.					
Printed/Typed Name		Signature		Date Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials				Date Month Day Year	
Printed/Typed Name		Signature		Date Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials				Date Month Day Year	
Printed/Typed Name		Signature		Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Date Month Day Year	

84645959

APPENDIX B
RECYCLING MEMORANDUM

MEMORANDUM

TO: File 40037
FROM: Dennis Miller
DATE: November 20, 1987
SUBJECT: Hunters Point - Inventory Work
RE: Disposal of Materials and Waste - Telecons with two
recyclers: Romic Chemicals - Santa Clara: 415-324-1638
Solvent Services - San Jose: 408-286-6446

California promotes recycling of industrial wastes - Reference: California Waste Exchange (CWE) program, a part of the DHS Toxic Substance Control Division. A CWE annual publication lists recyclers and the type of waste accepted by each recycler.

Initial contacts with recyclers indicate that certain wastes at Hunters Point can be recycled or incinerated. Recycling has the following advantages:

1. Minimal future liability since the materials/waste will be recycled as compared to landfilled. Landfill material can become a future liability if materials in the landfill leach to groundwater or the landfill has to be decommissioned, moved, or otherwise closed.
2. No taxes or surcharges.

Most materials can be recycled: Solvents; thinners; paints; flammables; oils - waste, automobile, hydraulic fluid, cutting, mineral spirits; batteries; antifreeze; acids; catalysts; caustics; metals; and many surplus materials.

Recyclers do not accept PCB wastes and do not test for PCBs.

Chlorinated materials can be recycled or incinerated depending on the percentage of chlorinated compounds. Cost of having a recycler remove and dispose of chlorinated materials is proportional to the concentration of chlorinated compounds. Pricing structure varies between recyclers.

Recyclers profile the material prior to removal from the site. What they typically check for is:

- Chlorinated percentage
- pH
- Water
- Viscosity
- Chemical composition
- Btu value
- Metals

Cost of the profiling is normally included in the pricing structure quoted by each of the recycling companies. Manifesting is required for recycling of hazardous waste materials.

APPENDIX C

HAZTECH SYSTEMS, INC
PRODUCT DATA

October 1987

Thank you for your inquiry for the HazCat Chemical Identification System. Accurate identification of a chemical hazard is not only vital at a chemical incident response, it is now required by law.

HAZCAT(tm) is a unique time-saving emergency response tool designed especially for on-site identification or categorization of virtually any spilled or abandoned material, liquid or solid. The HAZCAT system is designed for use by the non-chemist and can be used efficiently without a chemistry background. The system has been proven effective and safe by fire, environment health and military agencies across the U.S and Canada. The HAZCAT kit consists of 44 easily performed field tests which allow a non-chemist to quickly and precisely identify or categorize chemical substances.

An emergency responder can quickly control and stabilize a potentially hazardous incident by using the decision process inherent with HAZCAT. Costly delays created by the need to have unknowns chemical sent to distant laboratories for identification can be eliminated. Clean-up procedures can be started with confidence and completed more quickly.


The kit is boxed in a rugged ABS impact resistant case designed for field use. The box measures 19x11x11. This compact system can be stowed in an emergency response vehicle for instant accessibility. The test reagents are stable in most environments and climates.

HAZTECH SYSTEMS, Inc is a full service company which is owned and operated by people experienced in emergency response. We employ professionals from many fields including chemistry, industrial hygiene, hazardous materials management, and fire service.

Please review the enclosed product information. You may place an order by purchase order or calling (415)968-6025 in California or 800-5-ID KITS, outside California.

We look forward to serving you.

Sincerely



Marian Balster
President

HAZCAT CHEMICAL IDENTIFICATION SYSTEM

HAZTECH
SYSTEMS, INC.

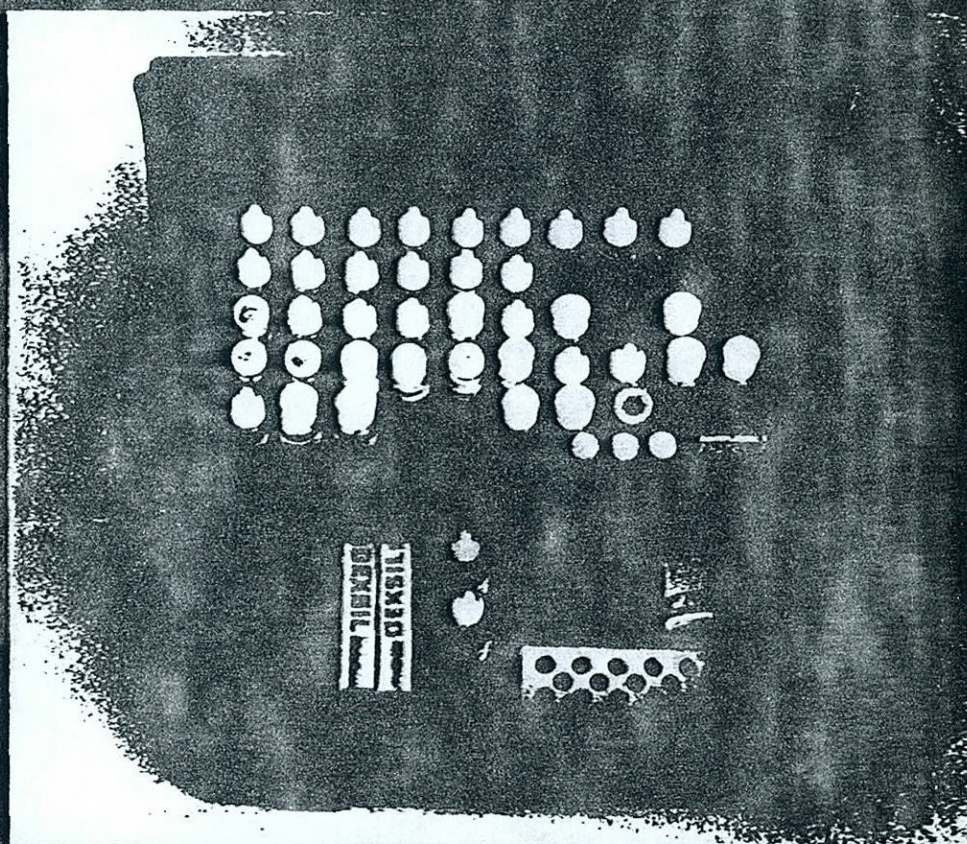
THE FIRST STEP IN IDENTIFYING UNKNOWN SPILLED MATERIAL

Hazcat is a unique, timesaving emergency response tool designed specifically for on-site identification or categorization of virtually any spilled or abandoned material—liquid or solid. The Hazcat system consists of Hazcat's performance field tests which allow a non-chemist to quickly and precisely identify or categorize chemical substances.

An emergency responder can quickly control and stabilize a chemical spill or leak without having to send the dangerous material with Hazcat. Hazcat allows the responder to take control of the chemical spill, to obtain laboratory identification, or to eliminate the material. Proper emergency response can be started with confidence and completed more quickly.

Packed in an easy-to-carry, impact-resistant ABS plastic case, the complete Hazcat system can be stored in an emergency response vehicle for instant accessibility. The Hazcat kit contains complete written instructions and all other materials needed for on-site chemical identification and categorization field tests.

- **Easy to use**—updatable field manual is easy for nonchemist to follow.
- **Cost effective**—may eliminate costly, time-consuming laboratory tests.



- **Versatile**—identifies or categorizes over 1,000 chemicals.
- **Fast**—20 minute typical on-site assay time.
- **Complete**—contains everything necessary for field testing. Nothing additional to purchase.
- **Rugged**—carrying case designed specifically for field use.
- **Inexpensive**—can pay for itself in one application.

TYPICAL APPLICATIONS OF HAZCAT

SPILLS

■ The California Highway Patrol and Caltrans closed the westbound lanes of the San Mateo Bridge when a white powder spill was discovered. Hazcat was used to quickly identify the powder as calcium phosphate, and the roadway was cleaned up and reopened to traffic within an hour. \$300 in lab analysis fees were saved.

A similar incident closed the San Francisco Oakland Bay Bridge for 12 hours. Thousands of commuters and businessmen were stopped in traffic while a sample of the material was sent to a laboratory. It was identified as talcum powder. If Hazcat had been used, the material could have been identified in minutes.

■ A sticky solution spotted along a California roadside was thought to be a caustic substance. Roads were closed and hazardous materials clean-up crews were called to the scene. The Hazcat system was used and the solution was identified as a sugar syrup. The identification saved the local county government \$6,000 in clean-up costs.

ENVIRONMENTAL ASSESSMENTS

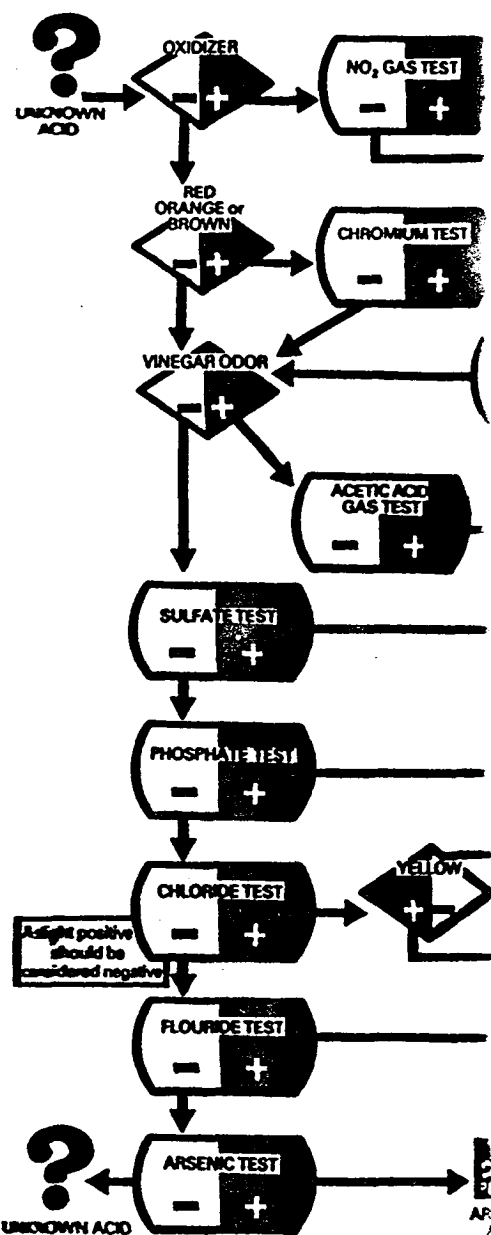
■ An unknown chemical substance was found in a trash dumpster. Laboratory cost estimates were \$1,000 for a broad chemical scan. Hazcat was used to break down the hazard components of the material, which was identified as a mixture of phenol/oil-based paint. Time involved: 30 minutes. Money saved: \$1,000.

■ The Federal Government offered "as is" an auto battery reclamation site for sale at an auction. A prospective buyer tested soil samples with the Hazcat system and discovered gross lead contamination, prompting a thorough laboratory analysis which confirmed the findings. A savings of \$1.5 million was realized by not purchasing the heavily contaminated property.

- Hazcat has proven useful in 95% of all hazardous materials incidents.
- Shelf life of kit is one year and more.
- Over 100 tests can be run with reagents provided.
- Combines several hard to obtain testing systems in one handy kit.

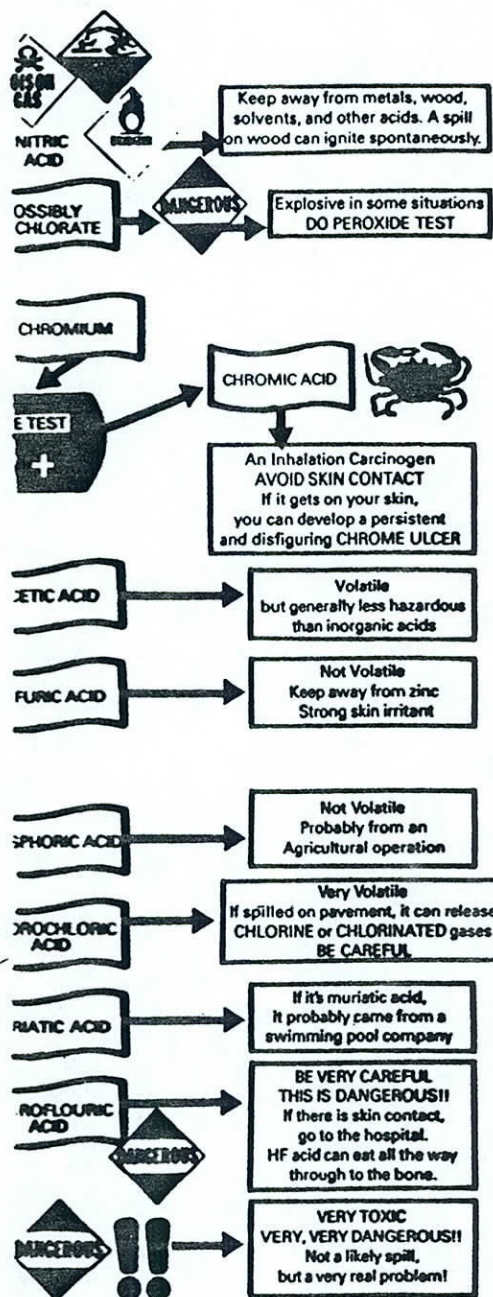
Partial list of users

University of California, San Diego
 US Navy, Point Mugu, CA
 US Marine Corps Logistics Base, Barstow, CA
 McClellan Air Force Base, Sacramento, CA
 Los Angeles County Fire Dept.
 San Francisco City/County Health Dept.
 City of Sunnyvale, CA
 City of Newport Beach, CA
 City of Scottsdale, AZ
 City of Phoenix, AZ
 Clear Creek County, CO
 US Department of Commerce, NOAA
 San Mateo County, CA
 Santa Barbara County, CA
 Kings County, CA
 Hughes Aircraft (several locations)
 Southern California Edison, San Clemente, CA
 Solar Turbines, San Diego, CA



ACIDS

HOW HAZCAT WORKS



Typical Decision-Tree Chart

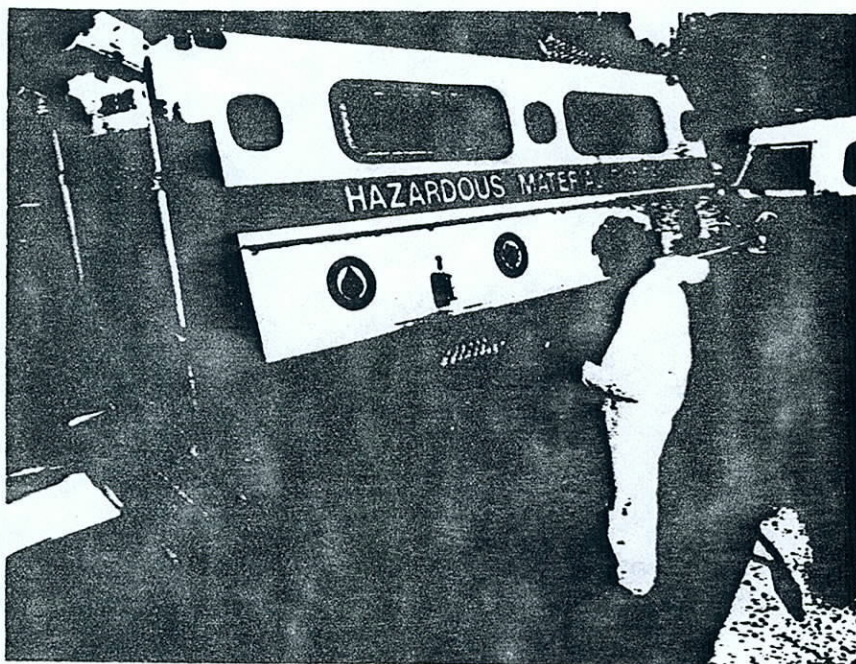
The Hazcat system guides the user through a decision-tree process to final identification of the chemical hazard. There is no need for formal chemical training to run the tests. The user simply follows the step-by-step procedures in the manual. To provide for any eventuality, test systems for both liquids and solids are included in the kit. More than 1,000 spilled substances can be identified or categorized.

- Easy to follow test instruction.
- Detailed, step-by-step users guide.
- Step-by-step diagrams and charts.
- Chemical clean-up guide.
- Quality controlled reagents with serial numbers.

Includes these NIOSH and EPA approved tests:

- Dexsil*—an easy to follow test packet to identify PCB oils and contaminated oils. This test is approved by the EPA.
- Colorphast*—pH test strips.
- EM Quant test strips.
- Draeger Indicator Tubes.
- Enzytec*—Organophosphate indicator test kit.

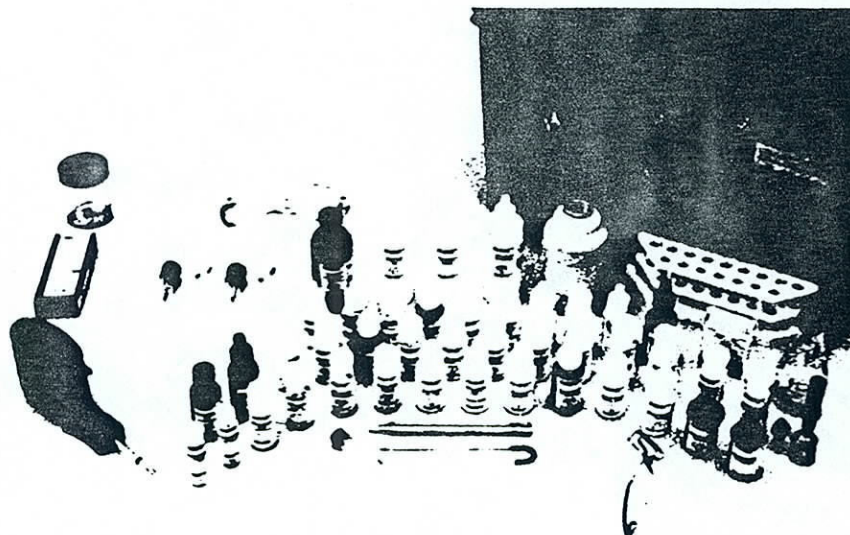
*Dexsil is a registered trademark of Dexsil Corp.; Colorphast is a registered trademark of EM Science; Enzytec is a registered trademark of Enzytec, Inc.



COST EFFECTIVE

The rapid results achieved with the low cost Hazcat Chemical Identification System makes it advantageous to use even if subsequent laboratory tests are required for confirmation. Chemicals can be categorized with Hazcat, reducing the full confirmation process to only selected substances — no expensive full-range testing.

**THE HAZCAT CHEMICAL IDENTIFICATION SYSTEM
CAN PAY FOR ITSELF IN ONE USE.**



ORDERING AND SHIPPING INFORMATION:

The Hazcat Chemical Identification System is complete with all materials and reagents. Useful life of reagents is one year or longer.

FOB Factory Complete \$875

FOB Factory w/o Draeger Pump \$700

Shipping Mode: UPS Surface, USA and Canada

Payment Terms: Net 10 days

Shipping Charges: Prepaid and added to invoice for USA and Canada

**Reagent and Equipment Replacement: Order by Number
(reorder blank included in kit)**

**Ordering: Call (800) 51D-KITS (in California (415) 968-6025) or write to address below
(include Purchase Order number or check)**

Customer Service/Support:

Technical support for Hazcat systems is available at no charge to answer questions about the system and the manual, discuss test procedures and to share field experience.

Other Haztech Products and Services:

Seminars — conducted by qualified professionals.

Unknown Chemicals for Practice Sessions

Sample Collection Kits

Replacement Reagents

Prices may change without notice

**HAZTECH
SYSTEMS, INC.**

2218 Old Middlefield Way, Suite J
Mountain View, CA 94047
(415) 968-6025

APPENDIX D
INVENTORY SUMMARY BY BUILDING/AREA
AND
MAJOR WASTE CATEGORY

Notes for Appendix D

The following listing summarizes the major waste categories and identifies the inventoried waste by building and area within Hunters Point. Under each building or area identifier there are two columns: count and vol. The count column identifies the number of times the material was noted in the waste category. The volume (vol) is the estimated quantity based on field observation.

If an entry has not been noted it means that the waste was not found in the specific building or area. Additionally, the individual inventory worksheet (Appendix E) must be used in conjunction with this listing, as the individual worksheets list the details of the waste noted and Appendix E provides details on the minor waste categories such as transformers (inventoried by others), non-friable asbestos, etc.

Abbreviations used in the building and area column identifiers are noted as follows:

DD = Drydock

SS = Substation

i.e. SS 411 is the substation associated with or near building 411. See Table 1 in report for alphabetic cross-referenced used by the electrical department at Hunters Point.

Count = number of times the major waste category was detected in the survey.

Vol = Estimated waste/material volume (in units noted)

Inventory Category	Totals	
	Count	Vol
Oils		
1 gallon	116	90
5 gallon	331	1339
10 gallon	7	49
55 gallon	254	10205
Bulk (gals)	0	734
Subtotal	708	12417
Oil (PCB)		
1 gallon	7	6
5 gallon	18	65
10 gallon	3	20
15 gallon	6	80
30 gallon	1	20
55 gallon	3	165
Subtotal	38	356
Paints		
1 gallon	96	75
5 gallon	47	213
10 gallon	3	25
55 gallon	0	0
Bulk (gals)	2	14500
Subtotal	148	14813
Solvents		
1 gallon	120	114
5 gallon	70	230
10 gallon	4	14
55 gallon	7	235
Bulk (gals)	0	135
Subtotal	201	728
Asbestos		
Friable, cu ft	0	76
Batteries, ea.		
Automotive	110	0
Others	94	0
Subtotal	204	0
Gas Cylinders		
All sizes, ea		
Acetylene	177	0
Propane	13	0
Atmospheric	56	0
Chlorine	6	0
Refrigerant	2	0
Other	35	0
Subtotal	291	0
Misc. Equipment		
Refrig. Units	58	0
Hyd. (PCB ??)	351	0
Subtotal	409	0
Solids, cu ft		
Sandblast	11	55
Misc	0	89
Subtotal	11	144
Acids		
1 gallon	0	0
5 gallon	1	5
15 gallon	0	0
55 gallon	0	0
Bulk (gals)	0	50
Subtotal	1	55
Caustics		
1 gallon	0	0
5 gallon	1	5
15 gallon	2	30
55 gallon	4	200
Bulk (gals)	0	50
Subtotal	7	285

INVENTORY BY MAJOR WASTE CATEGORY

Inventory Category	Bldg 19 Count	Bldg 102 Vol Count	Bldg 102 Vol Count	Bldg 113 Vol Count	Bldg 141 Vol Count	Bldg 146 Vol Count	Bldg 203 Vol Count	Bldg 204 Vol Count	Bldg 205 Vol Count	Bldg 207 Vol								
Oils																		
1 gallon				7	7		1	1	6	5		5	5					
5 gallon				6	14		13	14				4	20					
10 gallon				1	4													
55 gallon				3	110		1	55	2	80								
Bulk (gals)																		
Subtotal	0	0	0	0	17	135	0	0	15	70	8	85	0	0	9	25	0	0
Oil (PCB)																		
1 gallon															6	5		
5 gallon													2	10				
10 gallon																		
15 gallon																		
30 gallon																		
55 gallon																		
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	2	10	6	5	0	0
Paints																		
1 gallon	1	1					1	1							11	10		
5 gallon							6	4							3	15		
10 gallon																		
55 gallon																		
Bulk (gals)																		
Subtotal	1	1	0	0	0	0	0	0	7	5	0	0	0	0	14	25	0	0
Solvents																		
1 gallon				3	3		1	1					2	1	7	5		
5 gallon	2	8		1	5		5	4										
10 gallon													1	6				
55 gallon																		
Bulk (gals)																		
Subtotal	2	8	0	0	4	8	0	0	6	5	0	0	3	7	7	5	0	0
Asbestos																		
Friable, cu ft				1		1						10						
Batteries, ea.																		
Automotive	1				12													
Others																		
Subtotal	1	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
Gas Cylinders																		
All sizes, ea.																		
Acetylene																		
Propane																		
Atmospheric																		
Chlorine																		
Refrigerant																		
Other				5														
Subtotal	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equipment																		
Refrig. Units				1		2									2		1	
Hyd. (PCB ??)				2					1									
Subtotal	0	0	0	0	3	0	2	0	0	0	1	0	0	0	2	0	1	0
Solids, cu ft																		
Sandblast				1	5													
Misc																		
Subtotal	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0
Acids																		
1 gallon																		
5 gallon																		
15 gallon																		
55 gallon																		
Bulk (gals)																		
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caustics																		
1 gallon																		
5 gallon																		
15 gallon																		
55 gallon																		
Bulk (gals)											4	200						
Subtotal	0	0	0	0	0	0	0	0	0	0	4	250	0	0	0	0	0	0

Inventory Category	Bldg 253 Count	Bldg 258 Vol Count	Bldg 270 Vol Count	Bldg 271 Vol Count	Bldg 281 Vol Count	Bldg 282 Vol Count	Bldg 302 Vol Count	Bldg 369 Vol Count	Bldg 400 Vol
Oils									
1 gallon	2	2	4	3	1	1			
5 gallon	5	16	4	10	1	1	3	10	5
10 gallon							3	10	5
55 gallon	6	125			1	50			
Bulk (gals)		10		25		100		60	12
Subtotal	13	153	8	38	3	152	0	0	0
Oil (PCB)									
1 gallon									
5 gallon	6	5							
10 gallon									
15 gallon									
30 gallon									
55 gallon									
Subtotal	6	5	0	0	0	0	0	0	0
Paints									
1 gallon	14	9	8	2					
5 gallon	1	5			1	5	1	5	
10 gallon									
55 gallon									
Bulk (gals)									
Subtotal	15	14	8	2	1	5	0	0	0
Solvents									
1 gallon	7	5					7	5	
5 gallon									
10 gallon									
55 gallon	1	50					1	20	
Bulk (gals)						10			
Subtotal	8	55	0	0	0	0	0	0	0
Asbestos									
Friable, cu ft	15		4			4		1	1
Batteries, ea.									
Automotive	2						5		1
Others	12					1			
Subtotal	14	0	0	0	0	0	0	0	0
Gas Cylinders									
All sizes, ea.									
Acetylene	16						2		
Propane	10								
Atmospheric	11			1					
Chlorine									
Refrigerant									
Other						1	2	1	
Subtotal	37	0	0	0	1	0	0	0	0
Misc. Equipment									
Refrig. Units	7								
Hyd. (PCB ??)	50	10		4		3		2	11
Subtotal	57	0	10	0	4	0	0	0	0
Solids, cu ft									
Sandblast	2	10	1	5	1	5	1	5	
Misc		5		1					30
Subtotal	2	15	1	6	1	5	1	5	0
Acids									
1 gallon									
5 gallon	1	5							
15 gallon									
55 gallon									
Bulk (gals)									
Subtotal	1	5	0	0	0	0	0	0	0
Caustics									
1 gallon									
5 gallon	1	5							
15 gallon									
55 gallon									
Bulk (gals)									
Subtotal	1	5	0	0	0	0	0	0	0

Oils																		
1 gallon	1	1	2	2						2	2			1	1	1	1	
5 gallon	6	20	7	30						20	75						7	35
10 gallon			1	10														
55 gallon	2	55	81	4150										1	25	2	110	
Bulk (gals)																		
Subtotal	9	76	91	4192	10	300	0	0	22	77	0	0	2	25	3	111	7	35
Oil (PCB)																		
1 gallon																		
5 gallon																		
10 gallon													3	20				
15 gallon													6	80				
30 gallon																		
55 gallon																		
Subtotal	0	0	0	0	0	0	0	0	0	0	9	100	0	0	0	0	0	0
Paints																		
1 gallon													24	20	1	1	21	20
5 gallon													20	110	1	5	9	45
10 gallon																	3	25
55 gallon																		
Bulk (gals)																		
Subtotal	0	0	0	0	0	0	0	0	0	0	44	130	2	6	33	90	0	0
Solvents																		
1 gallon																		
5 gallon	1	5	7	30							3	2	3	12	12			
10 gallon											2	1	1	3	13	60		
55 gallon															1	3		
Bulk (gals)																		
Subtotal	1	5	7	30	2	50	5	3	4	3	26	75	0	0	0	0	0	0
Asbestos Friable, cu ft		1																
Batteries, ea.																		
Automotive			7		15								4		5			
Others										60								
Subtotal	0	0	7	0	15	0	0	0	60	0	4	0	5	0	0	0	0	0
Gas Cylinders																		
All sizes, ea.																		
Acetylene	150															1		
Propane													1					
Atmospheric																2		
Chlorine																		
Refrigerant																		
Other	5				8					2			5					
Subtotal	155	0	0	0	8	0	2	0	2	0	1	0	5	0	3	0	0	0
Misc. Equipment																		
Refrig. Units																		
Hyd. (PCB ??)	13				8		3			2		9					6	
Subtotal	13	0	0	0	8	0	3	0	2	0	9	0	0	0	0	0	6	0
Solids, cu ft																		
Sandblast																		
Misc		5																
Subtotal	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acids																		
1 gallon																		
5 gallon																		
15 gallon																		
55 gallon																		
Bulk (gals)																		
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caustics																		
1 gallon																		
5 gallon																		
15 gallon																		
55 gallon																		
Bulk (gals)																		
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[illegible]

Inventory Category	DD-2/3 Count	South Pier Vol	Pier 2 Count	Pier 2 Vol	SS 100 Count	SS 100 Vol	SS 122 Count	SS 122 Vol	SS 123 Count	SS 123 Vol	SS 128 Count	SS 128 Vol	SS 135 Count	SS 135 Vol	SS 140 Count	SS 140 Vol
Oils																
1 gallon					1	1										
5 gallon		6	25	7	45			1	5							
10 gallon																
55 gallon				1	10	1	45	3	55	2	55					
Bulk (gals)																
Subtotal	0	0	6	25	8	55	2	46	4	60	2	55	0	0	0	0
Oil (PCB)																
1 gallon																
5 gallon																
10 gallon																
15 gallon																
30 gallon																
55 gallon																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paints																
1 gallon																
5 gallon																
10 gallon																
55 gallon																
Bulk (gals)																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solvents																
1 gallon		1	1												3	1
5 gallon		4	9												1	3
10 gallon																
55 gallon																
Bulk (gals)																
Subtotal	0	0	5	10	0	0	0	0	0	0	0	0	0	0	4	4
Asbestos																
Friable, cu ft		2														
Batteries, ea.																
Automotive	2															
Others																
Subtotal	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gas Cylinders																
All sizes, ea.																
Acetylene																
Propane																
Atmospheric															1	
Chlorine																
Refrigerant																
Other																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Misc. Equipment																
Refrig. Units															1	
Hyd. (PCB ??)	4	5		3			5	3		2		1				
Subtotal	4	0	5	0	3	0	0	5	0	3	0	2	0	1	0	0
Solids, cu ft																
Sandblast																
Misc																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acids																
1 gallon																
5 gallon																
15 gallon																
55 gallon																
Bulk (gals)																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caustics																
1 gallon																
5 gallon																
15 gallon																
55 gallon																
Bulk (gals)																
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Oils
1 gallon 2 2 1 1
5 gallon 9 45 1 5 1 4 3 5
10 gallon
55 gallon 1 5 5 200 1 20
Bulk (gals)
Subtotal 12 52 0 0 7 206 1 4 0 0 0 0 0 0 0 0 0
Oil (PCB)
1 gallon
5 gallon
10 gallon
15 gallon
30 gallon
55 gallon
3 165
Subtotal 0 0 0 0 3 165 0 0 0 0 0 0 0 0 0 10 50
Paints
1 gallon
5 gallon
10 gallon
55 gallon
Bulk (gals)
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Solvents
1 gallon
5 gallon
10 gallon
55 gallon
Bulk (gals) 1 50
Subtotal 0 0 0 0 1 50 0 0 0 0 0 0 0 0 0 0
Asbestos
Friable, cu ft
Batteries, ea.
Automotive
Others
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Gas Cylinders
All sizes, ea.
Acetylene
Propane
Atmospheric
Chlorine
Refrigerant
Other
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Misc. Equipment
Refrig. Units
Hyd. (ACB ??)
1 1
Subtotal 1 0 3 0 6 0 4 0 2 0 4 0 3 0 1 0
Solids, cu ft
Sandblast
Misc
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Acids
1 gallon
5 gallon
15 gallon
55 gallon
Bulk (gals)
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Caustics
1 gallon
5 gallon
15 gallon
55 gallon
Bulk (gals)
Subtotal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

**APPENDIX E
INVENTORY WORKSHEETS AND PLANS –
NAVAL FACILITIES**

**PHASE I REPORT
HAZARDOUS WASTE/ MATERIAL INVENTORY**

**THE ABOVE IDENTIFIED APPENDIX
IS NOT AVAILABLE.**

**EXTENSIVE RESEARCH WAS PERFORMED BY
SOUTHWEST DIVISION TO LOCATE THIS
APPENDIX. THIS PAGE HAS BEEN INSERTED AS
A PLACEHOLDER AND WILL BE REPLACED
SHOULD THE MISSING ITEM BE LOCATED.**

QUESTIONS MAY BE DIRECTED TO:

**DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
SOUTHWEST
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132**

TELEPHONE: (619) 532-3676

**APPENDIX F
PHOTOS**

**PHASE I REPORT
HAZARDOUS WASTE/ MATERIAL INVENTORY**

**THE ABOVE IDENTIFIED APPENDIX
IS NOT AVAILABLE.**

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